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TRAVEL ANALYSIS

for the

Dorset-Peru Integrated Resource Project

Prepared For The
Manchester Ranger District,
Green Mountain National Forest

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BACKGROUND AND PURPOSE

On January 12, 2001, the Forest Service published its final administrative transportation system policy in the Federal Register (Vol. 66, No.9). Decisions to decommission, reconstruct, construct, and maintain roads are to be informed by a science-based roads analysis. On November 2, 2005 the Forest Service announced release of their final travel management rule (36 CFR parts 212, 251, 262, and 295). This regulation governs the use of motor vehicles, including off-highway vehicles, on National Forest System Lands. One of the purposes of these policies and rules is to insure travel analysis is carried out for Forest roads and trails to provide information needed to ensure the forest transportation system will:

- provide safe access and meets the needs of communities and forest users;
- facilitate the implementation of the Green Mountain National Forest Land and Resource Management Plan (Forest Plan);
- allow for economical and efficient management within likely budget levels; meeting current and future resource management objectives;
- and begin to reverse adverse ecological impacts, to the extent practicable.

PROCESS

Travel analysis is a six-step process (see below). The steps are designed to be sequential with understanding that the process may require feedback among steps over time as an analysis matures. The amount of time and effort spent on each step differs by project, based on specific situations and available information. The process provides a set of possible issues and analysis questions for which the answers can inform choices about road and trail system management. Decision makers and analysts determine the relevance of each question, incorporating public participation as deemed necessary.

- Step 1. Setting up the Analysis
- Step 2. Describing the Situation
- Step 3. Identifying Issues
- Step 4. Assessing Benefits, Problems and Risks
- Step 5. Describing Opportunities and Setting Priorities
- Step 6. Reporting

PRODUCTS

The product of this analysis is a report for decision makers and the public that document the information and analyses to be used to identify opportunities and set priorities for future Forest system roads and trails. Included in the report is a map displaying the known road and trail systems for the analysis area, and the needs and opportunities for each road / trail, or segment of road / trail.

THIS REPORT

This report documents the travel analysis procedure used for the Dorset-Peru Travel Analysis Area (analysis area). It was completed during the early development of the Dorset-Peru Integrated Resource Project (IRP) and Proposed Action scoping document. The Dorset-Peru IRP project area

is the same as the Travel Analysis area. This report is a "living" document and reflects the conditions of the analysis area at the time of writing. The document can be updated as the need arises and conditions warrant.

This report will:

- Identify needed and unneeded roads and trails;
- Identify road and trail associated environmental and public safety risks;
- Identify site-specific priorities and opportunities for road / trail improvements and decommissioning,
- Identify areas of special sensitivity or any unique resource values, and
- Any other specific information that may be needed to support project-level decisions.

PROJECT SCOPE & OBJECTIVES (Step 1)

The Dorset-Peru Travel Analysis Area is located north of Vermont State Routes 30 and 11, south of the Danby and Mt. Tabor town lines, and either side of US Route 7. The analysis area is primarily within the towns of Dorset and Peru, with a small portion of the project area located in the Towns Winhall and Manchester. The analysis area encompasses 41,699 acres with 25,929 acres (62%) in private ownership, and 1,000 acres (2%) owned by the State of Vermont – Emerald Lake State Park. The remaining 14,770 acres (36%) is National Forest System (NFS) lands administered by the Green Mountain National Forest (GMNF). Elevations in the analysis area range from 3,720 feet along Dorset Mountain and 3,402 feet at Peru Peak along the Appalachian/Long Trail to 669 feet along the Otter Creek on private lands in north Dorset. The northern and western portion of the area is part of the Otter Creek and Mettawee River headwaters watersheds while the southern and eastern portion contains most of the waters flowing to the West Branch Batten-kill watershed. The area has a small network of Forest Service and Town roads and trails. While development is heaviest around the village centers of Dorset and Peru, private residences (some seasonal) are scattered throughout the private lands.

The 2006 GMNF Land and Resource Management Plan (Forest Plan) designates different Management Areas (MAs) with each having a major emphasis and Desired Future Conditions (DFC), and provides specific management direction for activities needed to achieve Forest Plan goals and objectives. Nine (9) Forest Management Areas (MAs) are contained in the Dorset-Peru Travel Analysis project area: 3.1 – Diverse Forest Use, 5.1 – Wilderness, 6.1 - Remote Backcountry Forest, 6.3 – Remote Wildlife Habitat, 7.1 – Alpine Ski Areas, 8.1 – Appalachian National Scenic Trail, 8.5 – Green Mountain Escarpment, 9.3 – Alpine Ski Area Expansion, and 9.4 – Eligible Wild, Scenic, & Recreational Rivers (on private lands). The Dorset-Peru IRP area consists of all, or portions of, fourteen (27) Compartments (C) 39, 40, 41, 49, 50, 56, 57, 58, 59, 60, 61, 62, 63, 195, 196, 197, 198, 199, 204, 205, 206, 207, 208, 209, 210, 226, and 227. Forest Compartments are land units averaging approximately 1,500 acres. Compartments are divided into stands which consist of similar vegetation and site conditions.

All existing or proposed roads and trails within this area were reviewed and opportunities regarding their future use are stated in accordance with Forest objectives. Other entities, such as towns, having joint, partial, or total road or trail jurisdiction will be consulted during NEPA analysis to coordinate any actions regarding subject roads / trails. Any access requirements off of Town or State roads will

also be coordinated with the appropriate authority; and applicable permits obtained. The Towns of Dorset and Peru have roads / trails in the analysis area. The Towns of Dorset, Peru, Manchester, and Winhall have roads / trails in the analysis area. The US has one highway (US 7) in the project area and the State has three roads (VT-7A, VT-11, and VT-30) in the Dorset-Peru project area. There are a small number of private roads in the area off Forest land. There are also some unauthorized roads and old skid trails evident. Many of these are included in this analysis, but a complete inventory was not considered necessary for the analysis.

The focus of the analysis is limited to the Dorset-Peru Travel Analysis Area for the following reasons:

- A forest scale roads analysis of the primary transportation routes has been completed for the Green Mountain National Forest, however it did not include lower level (4wd and closed) Forest roads, Forest trails, or unauthorized roads and trails as part of its analysis.
- This travel analysis is driven by a need to analyze management alternatives at the project scale and make recommendations for the minimum transportation system for the Dorset-Peru IRP Project area.

Main objectives of this travel analysis are:

- Identify the need for changes by comparing the current road / trail system to the desired condition;
- Balance the need for access with the need to minimize risks by examining important ecological, social, and economic issues related to roads and trails;
- Furnish narratives, tables, and maps that display transportation management opportunities and strategies that address future access needs, and environmental concerns.
- Make recommendations to inform travel management decisions in subsequent NEPA documents.

MANAGEMENT DIRECTION, DEFINITIONS, AND STANDARDS & GUIDELINES (Step 1 cont.)

Management Area Direction (see Appendices for General Forest Road & Trail Standards & Guidelines)

The Green Mountain National Forest Land and Resource Management Plan (Forest Plan) serves as the guiding document for all land management activities on the GMNF, including roads, trails and transportation systems. The Forest Plan provides programmatic direction in the form of Goals & Objectives, Standards & Guidelines as well as Management Area Standards & Guidelines.

Goal 14 of the Forest Plan (p. 16) states “Provide a safe, efficient, and effective Forest transportation system that meets both the needs of the Forest Service and the public.”

Goal 12 of the Forest Plan (p. 15) states “provide a diverse range of high-quality, sustainable recreation opportunities that complement those provided off National Forest System lands.” Three objectives tiered to Goal 12 relate specifically to the trail transportation system.

1. Increase the effective use of partnerships in the improvement, maintenance, and operation of the Forest trails system.
2. Increase the number of miles of trail that are operated and maintained to full standard.
3. Reduce the total deferred maintenance on the GMNF trails system.

The Forest Plan Standards & Guidelines (S&G) also provide management direction for the trail and road systems. All Forest Plan S&Gs are applicable in project planning, but those that are most relevant to this analysis include:

1. Trail maintenance and improvement activities should focus on the reduction of deferred maintenance needs on existing trails before the development of new trails.
2. All trails should be monitored for resource impacts in accordance with an established monitoring plan. Responsibility for monitoring should be shared by the Forest Service and cooperators.
3. Multiple use trails should be emphasized over single use trails where the uses are compatible.
4. The Forest Service shall cooperate with State and towns governments and highway departments in managing town-maintained roadways through the Green Mountain National Forest.
5. Public access shall be controlled to meet 2006 Forest Plan management objectives such as achieving desired recreation opportunities and protecting wildlife habitats.

The Dorset-Peru analysis area contains nine (9) Forest Plan Management Areas (MA's) as stated above. Each MA has standards & guidelines that provide management direction for the trails and roads transportation system. They are as follows:

MA 3.1 – Diverse Forest Use: Vegetation management emphasis is placed on production of high quality sawtimber and other timber products on a sustained yield basis. Management actions provide a mix of habitats for wildlife species, including deer wintering habitat. Habitat at the landscape level will include a sustainable mix of young and mature forests. Permanent upland and temporary openings will occur across the landscape in shapes and sizes that are consistent with visual objectives in the area. Public use is managed to provide a full range of recreation opportunities. Vistas of landscapes with a mosaic of vegetative patterns will be provided along roads and trails.

Roads (new and existing) are allowed to provide access to meet land management objectives. Forest-wide standards and guidelines for roads apply.

The desired future condition states that recreation management will be towards the desired ROS of Roaded Natural. There are MA Standards & Guidelines that specifically restrict trail use and development.

MA 5.1 – Wilderness: The Wilderness Management Area emphasizes the management and protection of congressionally designated wilderness areas. Management emphasizes the maintenance of wilderness values consistent with the Wilderness Act of 1964 and subsequent legislation.

Roads shall be prohibited unless required by law to provide access to private land or easements. Decommissioned roads shall be restored to landscape level or converted to trails. Historically significant roads may be closed, rather than decommissioned, as determined through SHPO. Actions for closing roads shall follow Forest Service transportation policy. The use of horses, pack animals, dog teams, bicycles, and motorized vehicles in Wilderness shall be prohibited, except for search and rescue operations with Forest Supervisor approval, fire suppression with Forest Supervisor approval, and motorized access to private in-holdings as authorized by law and permits.

The desired future condition states that recreation resources will be managed toward the desired Recreation Opportunity Spectrum (ROS) Class of Primitive. The use of horses, pack animals, dog teams, bicycles, and motorized vehicles in Wilderness shall be prohibited, except for search and rescue operations with Forest Supervisor approval, fire suppression with Forest Supervisor approval, and motorized access to private in-holdings as authorized by law and permits. Trails may be added or eliminated to protect wilderness values. Trails should be constructed, relocated, and maintained to a minimum standard necessary for the protection of the soil, water, vegetation, visual quality, user safety, and long-term maintenance. Emphasis should be placed on trails that appear to be part of the wilderness environment and not an intrusion on it.

MA 6.1 – Remote Backcountry Forest: This management area emphasizes large expanses of relatively natural landscapes where terrestrial and aquatic ecosystems develop under natural disturbance regimes. Management actions are limited to those that help restore or maintain natural processes, natural communities, and associated species within their natural ranges of variation in the landscape.

New road construction shall be prohibited unless required by law to provide access to private land. Existing roads shall be managed to the lowest traffic service and maintenance levels possible, and shall be closed to public motorized vehicle traffic.

MA 6.3 – Remote Wildlife Habitat: This management area emphasizes different-aged forest habitats, from early succession to old forests, for the primary benefit of diverse wildlife species, including reclusive wildlife species. This MA creates diverse habitats, including permanent upland and temporary openings and brushy areas that compliment wildlife habitat management in other management areas.

Recreation uses are de-emphasized to minimize continuing disturbance to wildlife. Motorized trail use shall be limited to winter use of designated Forest Service system trails.

New permanent roads shall be prohibited unless required for administrative purposes including timber harvest and designated special uses, or required by law to provide access to private land. New roads shall be closed to motorized access by the public. Temporary roads and skid trails shall be permitted, but shall be closed at the completion of their intended use.

MA 7.1 – Alpine Ski Areas: This management area emphasizes alpine winter sports opportunities and year-round recreation opportunities at alpine ski areas managed by the private sector under Special Use permit authority.

Management activities in this MA shall not create adverse impacts to the Appalachian National Scenic Trail. Motorized trail vehicles except snowmobiles shall be prohibited unless required by law to provide access to private land or for administrative uses. The recreation values of the Appalachian National Scenic Trail should be considered in management actions at the ski areas.

Permittees may develop an on-mountain transportation plan for roads and parking on the National Forest to be approved by the Forest Engineer and line officer.

MA 8.1 – Appalachian National Scenic Trail: The Appalachian National Scenic Trail (Appalachian Trail) is administered by the Secretary of Interior in consultation with the Secretary of Agriculture, and managed as a partnership between the National Park Service (NPS) AT Park Office, USDA Forest Service, local Appalachian Trail Clubs, and the Appalachian Trail Conference (ATC). The Appalachian Trail (AT) includes all trails designated by the National Trails System Act, as amended (P.L. 90-543), that occur on federal lands managed by the Forest. The AT also includes spur trails to shelters, overnight-use sites, viewpoints, and water sources. The Appalachian National Scenic Trail has been designated as a special area because of its uncommon and outstanding values. The intent is to protect the qualities of the AT that make it a part of the National Scenic Trail System. The major emphases of this management area are to: manage the segments of the Appalachian National Scenic Trail on federal lands that traverse the State of Vermont and the Green Mountain National Forest; provide for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the land through which the AT passes; Provide opportunities for high quality outdoor recreation experiences, including a sense of "wildness"; and recognize and strengthen the level of partnership, cooperation, and volunteer efforts integral to AT management. This management area will retain a natural, forested appearance shaped by both natural and human processes. Management practices will be modified to recognize the significant aesthetic and recreational values of these lands.

New roads, permanent or temporary, shall not be constructed to cross the AT footpath unless required by law to provide access to private lands. New roads, permanent or temporary, should not be permitted within this management area unless required by law to provide access to private lands. New roads are permitted only if they are the only feasible and prudent alternative, and after impacts have been mitigated to the extent practical. Where the AT follows National Forest System roads, road maintenance may be done as needed on drainage structures, closure devices, and the roadbed. Grass may be permitted to grow in local roads at maintenance levels I or II. Trailhead Parking: To maintain a discrete trail experience, new parking facilities should be located where the AT can be accessed by a spur trail rather than locations where the trail footpath crosses a road.

MA 8.5 – Green Mountain Escarpment: This management area emphasizes management of natural communities. Several natural communities found in this landscape are rare or uncommon, and provide habitat for trees, herbs, and ferns considered rare or uncommon on the Forest or within the State. Emphasis is on management to maintain natural community diversity and to maintain or enhance populations of rare or uncommon plant and animal populations.

New motorized trails shall be prohibited. Motorized trail vehicles except snowmobiles shall be prohibited unless required by law to provide access to private land. Maintenance and relocation of existing trails may occur only for resource protection and visitor safety. Construction of new trails should not be permitted except for education and interpretation enhancements or for protection of escarpment desired future conditions. Trail use by horses, pack animals, dog teams, bicycles, and motorized vehicles may be permitted as long as such uses do not interfere with Escarpment desired future conditions. Opportunities to relocate existing motorized trails outside of the Escarpment should be considered.

National Forest System roads should be managed at the lowest traffic service and maintenance levels possible. New roads should not be constructed unless they protect or contribute to Escarpment desired future conditions, or are required by law to provide access to non-federal land. Maintenance and relocation of existing trailheads may occur only for resource protection and visitor safety. Construction of new trailheads should not be permitted except for education and interpretation enhancements or for protection of Escarpment values.

MA 9.3 – Alpine Ski Area Expansion: This management area recognizes the potential need for ski area expansion, and manages the land so as not to preclude future ski area development.

Existing foot trails may be maintained until alpine ski area development of the area. Existing motorized trails may be maintained until alpine ski area development of the area. No new motorized trail construction is permitted.

Existing roads unnecessary for management area objectives and desired future conditions should be closed and re-vegetated.

MA 9.4 - Eligible Wild, Scenic and Recreational Rivers: The emphasis of this management area is to protect and enhance the "outstandingly remarkable values" (ORVs) that led those rivers and streams within this management area to be determined as eligible Wild, Scenic, and Recreational Rivers (Forest Plan p. 105). The project area includes a portion of an eligible Recreational River – the Otter Creek.

Forest-wide standards and guidelines in the Forest Plan for roads and trails apply.

<u>Road Maintenance Level Descriptions (FSH 7709.58, see Appendices for additional travel management definitions)</u>

Maintenance Level 1 (OML 1). Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate." Roads receiving level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at level 1, they are closed to vehicular traffic, but may be open and suitable for

nonmotorized uses.

Maintenance Level 2 (OML 2). Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic management strategies are either to (1) discourage or prohibit passenger cars or (2) accept or discourage high clearance vehicles.

Maintenance Level 3 (OML 3). Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or "accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.

Maintenance Level 4 (OML 4). Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. The most appropriate traffic management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.

Maintenance Level 5 (OML 5). Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is "encourage."

Forest Service Manual & Handbook Trail Management Definitions

National direction for trail management is primarily found in FSM 2350 Trail, River and Similar Recreation Opportunities and FSM 2309.18 Trails Management Handbook Chapter 10 (Trail Planning) and Chapter 20 (Trail Development). The following are key definitions used in this analysis.

Trail Type. A trail type is a category that reflects the predominant trail surface and general mode of travel accommodated by a trail. There are three trail types for NFS trails: Standard Terra Trail, Snow Trail and Water Trail. Trail types are to be identified for each NFS trail based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction.

Trail Class. The Trail Class is the prescribed scale of development for a trail, representing its intended design and management standards. Trail classes are general categories reflecting trail development scale, arranged along a continuum. There are five trail classes ranging from the least developed (Trail Class 1) to the most developed (Trail Class 5). Trail classes are to be identified based on the management intent in the applicable land management plan, travel management decisions, trail-specific decisions, and other related direction. Trail class assignments are to most closely reflect the management intent for the trail, which may or may not reflect the current condition of the trail.

Managed Use. Managed uses are the modes of travel that are actively managed and appropriate on a trail, based on its design and management. Managed use indicates management intent to accommodate a specific use. There can be more than one managed use per trail or trail segment. The managed uses for a trail are usually a subset of all the allowed uses on the trail, that is, uses that are allowed unless specifically prohibited. Managed uses are based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction.

Designed Use. Designed Use is the Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with applicable Trail Class, determines which Design Parameters apply to a trail. There is only one Designed Use per trail or trail segment. Although a trail or trail segment may have more than one Managed Use and numerous uses may be allowed, only one Managed Use is identified as the design driver or Designed Use.

Design Parameters. Design Parameters are technical guidelines for the survey, design, construction, maintenance, and assessment of a trail, based on its Designed Use and Trail Class. Design Parameters reflect the design objectives for NFS trails and determine the dominant physical criteria that most define their geometric shape. These criteria include Design Tread Width, Design Surface, Design Grade, Design Cross Slope, Design Clearing, and Design Turns.

EXISTING ROAD & TRAIL SYSTEM AND HISTORIC USE (Step 2)

The analysis area is primarily located in the Towns of Dorset and Peru. Primary access to the area is provided by US route 7 running north/south and VT State Routes 30 and 11 running generally east/west and eventually connecting to VT State Route 100 on the other side of the Green Mountain range. There are also several Class 2, 3 and 4 Town Highways in the project area that provide collector access to the larger State routes. Several other NFS roads, Town Highways, and a few private roads; provide the remaining network of motor vehicle access within the project area. Forest roads providing the more significant access to Forest land in the analysis area include FR 21 Mad Tom and FR 58 Staples Brook, both in the Town of Peru.

The area has a long history of settlement and land use. Many of the forest system roads, as well as the Town owned roads, have been used repeatedly over the years for timber management and recreation activities. The Forest System and Town roads in the project area are all very low-volume local roads (ADT<400). The local road with the highest Average Annual Daily Traffic (AADT) is TH 3 Morse Hill Road in Dorset with an AADT of 930 vehicles (VTrans 2007 data). VTrans estimated 2008 AADT's on US 7 are 5,200 near TH-5 Mad Tom Road; on VT State Route 11 are 3,400 near TH-2 Main Street; and on VT State Route 30 are 5,300 near TH-3 Morse Hill Road.

Popular recreation activities within the Dorset-Peru area include hiking, biking, horseback riding, snowmobiling, skiing, fishing, dispersed camping, hunting, and viewing wildlife and natural features. Recreation users primarily access the area via Forest Roads 21 (Mad Tom Notch RD), 22 (North RD), 58 (Staples Brook) and 259 (Mad Tom RD, TH 5) and Town Highways 3 (Morse Hill), TH 10 (Dorset Hollow and Tower Rds) off of VT State Highways 7, 11 and 30. There are

three managed portals to the Big Branch and Peru Peak Wilderness Areas, and the Robert T. Stafford White Rocks National Recreation Area: from the Appalachian Trail/Long Trail (FT 1) at Mad Tom Notch RD (FR 21); from FR 58 including the Griffith Lake trailhead, and from outside the project area from the Lake Trail and trailhead on South End RD in Mount Tabor

Table TA-1 Developed Recreation Sites within the Dorset-Peru Analysis Area.

Forest Service Recreation Site	**PAOTs**	**Primary Access (Travel Route)**	**Recreation Opportunities**
Bromley Mountain Ski Resort	NA	VT 11/30	Provides downhill skiing , snowboarding, and summer adventure opportunities. There is lodging and a base lodge with a restaurant at the resort.
Bromley Shelter	22	VT 11/30	Provides camping for AT/LT hikers.
Peru Peak Shelter	13		Provides camping for AT/LT hikers.
Appalachian/Long Trail trailhead at Rte 11/30	35	VT 11/30	Provides hiking access to Bromley Shelter, Bromley Mountain and Spruce Peak shelter (not in IRP). Trailhead also provides parking for mountain biking access to Mad Tom Notch (and further), and for snowmobiling north and south on Corridor 7. Kiosk at site and 2 VAST backboard signs.
Appalachian/Long Trail trailhead at Mad Tom Road	35	FR 21	Provides hiking access to Bromley Mountain, and Spruce Peak (Peru Peak Wilderness), Peru Peak (Peru Peak Wilderness), and Griffith Lake. Kiosk located across from Trailhead on north side of the road (out of IRP).
Griffith Lake trailhead	18	FR58	Provides mountain biking access south to VT 11/30 and north to Griffith Lake (not designated as such). Also used for hiking access to Griffith Lake, Baker Peak (Big Branch Wilderness) and Peru Peak Shelter. Hiking trail is not in INFRA. Kiosk at site.
Grouse Lane parking (Not an official Developed Recreation Site)	NA	Dorset Hollow Road	Provides access for hunters (mostly) in the Dorset Peak Area. Has Forest Service Trail Sign (P71 and Parking), but area not maintained.
Other Recreation Sites		**Primary Access (Travel Route)**	**Recreation Opportunities**
Emerald Lake State Park and parking (VAST TH) (Not a developed Recreation Site)		VT7	Provides camping and boating facilities, and serves as an unofficial access to Dorset Peak Ridge from State Land, across private land.
Mad Tom Notch/FR21 town snow plow turnaround (Not a developed recreation site)		FR21	Provides parking for snowmobile access to Corridor 7/FT385. Not on FS land. Town snowplow turn a round.
Mad Tom Road Trailhead (Not a Developed Recreation Site)		VT7	Provides access to an abandoned historical trail up Mad Tom Brook from Dorset Town Trail right-of-way.
Dorset Field Club		Church ST	Provides 18 hole golf course, tennis courts and related facilities, private
Dorset RV Campground		VT30	Provides RV camping, private

Maryville Campground		VT7	Provides RV camping, private

There are four FS developed recreation sites within the area including trailheads and Bromley Mountain Ski Resort and one trailhead on FS land that is not currently a FS developed recreation site. There are also developed recreation sites located on State, town and private lands in the Project area. Table TA-1 displays the recreation sites, PAOTs (maximum capacity of people at one time), primary access travel route, and recreation opportunities. Six of the seven road based recreation sites are accessed by either town or state highways.

The Forest Service uses a nationally recognized classification system called the Recreation Opportunity Spectrum (ROS) to describe different recreation settings, opportunities and experiences to help guide recreation management activities and inform visitors of experience expectations (USDA 1986). The 2006 Forest Plan refers to ROS in two different ways including the inventoried ROS and desired ROS (Forest Plan FEIS, p. 3-200). The inventoried ROS is the current inventory or existing condition of recreation settings. The desired ROS is the direction recreation management actions take to achieve the recreation setting objective. Each Management Area is assigned a desired ROS in the 2006 Forest plan. Table TA-2 displays the differences between the inventoried ROS (current condition) and desired ROS (desired future condition) of the Dorset-Peru project area.

Table TA-2 Inventoried ROS and Desired ROS in the Dorset-Peru Analysis Area.

Recreation Opportunity Spectrum (ROS) Class	Inventoried ROS acres (percent)		Desired ROS acres (percent)	
Primitive (P)	0		2879	(19%)
Semi-Primitive Non-Motorized (SPNM)	5362	(36%)	4770	(32%)
Semi-Primitive Motorized (SPM)	2751	(19%)	2677	(18%)
Roaded Natural (RN)	6006	(41%)	4202	(28%)
Rural (R)	650	(4%)	242	(2%)
Data from GMNF GIS databases. Slight variations in total acres due to GIS data analysis.				

Table TA-3 displays all known public roads in the analysis area, their current physical status, mileage, jurisdiction, management area located in, and operational maintenance level (Forest Service jurisdiction only). Information on Town Highways (TH) such as Town, Class, and mileage is provided, and is based on information contained in the State General Highway Map for each Town. Note: there are several numbered Forest Roads (FR) in the analysis area that are not under Forest Service jurisdiction. Additionally the split table below (TA-3.1) shows four Town roads in Winhall and Manchester providing access or potential access to USFS lands, but that are outside the Travel Analysis Area.

Table TA-3 – Dorset-Peru Travel Analysis Area Existing Public Roads

Road Name	Road ID#	Road Length, Miles	Open Road, Miles	Closed or Stored Road, Miles	Mgmt. Area	FS Jurisdiction, Miles	Local or Other Jurisdiction, Miles	OML (FS) Class (TH)
US Highway US Route 7	**US 7**	6.718	6.718	0	3.1 / 8.5	US	8.67	N.A.
VT State Highway VT Route 7A	**VT 7A**	1.728	1.728	0	3.1	VT	1.728	N.A.
VT State Highway VT Route 11	**VT 11**	3.835	3.835	0	3.1 / 8.1 / 8.5	VT	3.835	N.A.
VT State Highway VT Route 30	**VT 30**	5.225	5.225	0	3.1 / 6.2	VT	5.225	N.A.
Forest Highway 3 Hapgood Pond	**FH 3 TH 1**	3.24	3.24	0	3.1	Peru	3.24	Class 2
Mad Tom a.k.a Mad Tom Notch	**FR 21 TH #**	5.48	5.48	0	3.1 / 6.3 / 8.1	2.83 Peru	- 2.65	OML 3 Class 3
Mad Tom AT/LT Parking	**FR 21A**	0.02	0.02	0	8.1	0.02	-	OML 3
Mad Tom Winter Parking	**FR 21B**	0.02	0.02	0	6.3	0.02	-	OML 3
North Road	**FR 22 TH 4**	1.55	1.55	0	3.1	Peru	1.55	Class 3
Staples Brook	**FR 58**	2.07	2.07	0	3.1	2.07	-	OML 3
Hapgood Pumphouse	**FR 79**	0.10	0.10	0	3.1	0.10	-	OML 2
Morris Brook a.k.a. Pierce	**FR 258 TH 18**	0.42	0.42	0	6.3	Peru	0.36 / 0.06	Class 3 / 4
East Dorset a.k.a. Mad Tom /Village Street	**FR 259 TH 5**	4.78	4.78	0	8.5	Dorset	4.37 / 0.41	Class 2 / 3
Mad Tom Brook North	**FR 283**	0.50	0	0.50	8.5	0.50	-	OML 1
Mad Tom Brook a.k.a. Legal Trail 10	**FR 284 LT 10**	0.30	0	0.30	8.5	Dorset	0.30	Legal Trail
Little Mad Tom a.k.a Tennis Way (LT 8)	**FR 285 LT 8**	1.00	0	1.00	8.5	1.00*	0.97*	OML 1 Legal Trail
Bromley Parking	**FR 286**	0.06	0.06	0	8.1	0.06	-	OML 3
Morse Hill	**TH 3**	3.70	3.70	0	3.1	Dorset	3.70	Class 2
Peace Street	**TH 6**	0.82	0.82	0	3.1	Dorset	0.82	Class 3
Upper Hollow	**TH 7**	2.40	2.40	0	3.1	Dorset	2.40	Class 3
Road Name	**Road ID#**	**Road Length, Miles**	**Open Road, Miles**	**Closed or Stored Road, Miles**	**Mgmt. Area**	**FS Jurisdiction, Miles**	**Local or Other Jurisdiction, Miles**	**OML (FS) Class (TH)**
Danby Mountain	**TH 8**	3.10	3.10	0	3.1	Dorset	3.10	Class 3
Kirby Hollow	**TH 9**	1.10	1.10	0	3.1	Dorset	0.55 / 0.55	Class 3 / 4
Dorset Hollow / Lower Hollow / Tower	**TH 10**	4.18	4.18	0	3.1	Dorset	4.18	Class 3
Dorset Hill / Sweeney Lane	**TH 15**	2.89	2.89	0	3.1	Dorset	2.89	Class 3

Bowen Hill	**TH 17**	1.20	1.20	0	8.5	Dorset	1.20	Class 3
Squirrel Hollow	**TH 22**	0.17	0.17	0	3.1	Dorset	0.17	Class 3
Paul's Way / Kirby Hollow	**TH 38**	1.55	1.55	0	3.1	Dorset	1.55	Class 3
Savage	**TH 13**	0.57	0.57	0	6.3	Peru	0.57	Class 3
Batchelder Barn	**TH 14**	0.20	0.20	0	6.3	Peru	0.20	Class 3
Moss Brook	**TH 15**	1.04	1.04	0	6.3	Peru	1.04	Class 3
Russel Road	**TH 19**	0.22	0.22	0	3.1	Peru	0.22	Class 3
Bradford	**TH 27**	0.17	0.17	0	6.3	Peru	0.17	Class 3
North	**TH 28**	0.05	0.05	0	6.3	Peru	0.05	Class 3
Adams Lane	**TH 32**	0.17	0.17	0	6.3	Peru	0.17	Class 3
TOTAL (ROADS)	-	**60.576**	**58.776**	**1.80**	-	**6.60**	**54.946**	-

Table TA-3.1 – Dorset-Peru Additional Existing Public Roads (outside TA area)

Road Name	Road ID#	Road Length, Miles	Open Road, Miles	Closed or Stored Road, Miles	Mgmt. Area	FS Jurisdiction, Miles	Local or Other Jurisdiction, Miles	OML (FS) Class (TH)
Snowflake	**TH 33**	0.25	0.25	0	8.5	Winhall	0.25	Class 3
Bromley Forest	**TH 57**	0.30	0.30	0	8.5	Winhall	0.30	Class 3
Saltzman	**TH 72**	0.07	0.07	0	8.5	Winhall	0.07	Class 3
Johnnycake Street	**TH 22**	0.58	0.58	0	8.5	Manchester	0.58	Class 3

Note: * -FR 285 and Dorset LT 8 overlap.

Table TA-4 displays the current number of acres, miles of existing road, and road density by management area for State, Town, and NFS roads.

Table TA-4 – Travel Analysis Area Road Density – Existing/Current, All & NFS Roads

MA	Approx. Acres	Sq. Miles	Existing Roads, miles	Existing Roads, mi./sq. mi.	Remarks
3.1	4,487	7.011	7.19 (ALL) 5.00 (NFS)	1.026 0.713	ALL = State, TH, & NFS NFS = FS jurisdiction
5.1	2,879	4.498	0 (ALL) 0 (NFS)	0 0	NFS Roads prohibited unless required by law to provide access to private land
6.1	2,952	4.613	0 (ALL) 0 (NFS)	0 0	New NFS Roads prohibited unless required by law to provide access to private land. Existing NFS roads maintained to lowest OML
6.3	1,010	1.578	1.10 (ALL) 0.02 (NFS)	0.697 0.013	New NFS Roads prohibited unless required for administration or SUP
7.1	157	0.245	0 (ALL) 0 (NFS)	0 0	Permittees may develop transportation plans for USFS approval
8.1	523	0.817	0.46 (ALL) 0.08 (NFS)	0.563 0.098	New NFS or temp. roads prohibited unless required by law to provide access to private land
8.5	2,224	3.475	1.80 (ALL) 0.70 (NFS)	0.518 0.201	New NFS Roads prohibited unless required by law or protect or contribute to MA DFC. Existing NFS roads maintained to lowest OML
9.3	84	0.131	0 (ALL) 0 (NFS)	0 0	Existing roads unnecessary for MA objectives and DFC should be closed and re-vegetated
9.4	---	---	---	---	MA 9.4 acres are on non-federal lands

Table TA-5 displays the current annual operations and maintenance and overall deferred maintenance costs on the NFS road system within the Dorest-Peru Project area. The Town of Peru has also received a small amount of maintenance funds from the Forest Service occasionally for Town roads that provide significant access to National Forest lands through a Road Coop Project Agreement. The roads under this agreement within the project area are FR 21 & FR 22. Forest Highway 3 (Peru TH 1) has also received separate Forest Highway funding for larger road reconstruction type projects.

Table TA-5: NFSR Operations & Maintenance (O&M) and Deferred Maintenance Costs

Road Number	OML Level	Miles	Annual O&M (1 grading & drainage only)	Deferred Maintenance (gravel & other)
NFSR 21	3	2.83	$1,924	$0
NFSR 21A	3	0.02	$14	$0
NFSR 21B	3	0.02	$14	$0
NFSR 58	3	2.07	$1,408	$0
NFSR 79	2	0.10	$64	$5,000
NFSR 283	1	0.50	$0	$5,000
NFSR 285	1	1.00	$0	$10,000
NFSR 286	3	0.06	$41	$0
	TOTALS =	**6.60**	**$3,465**	**$20,000**
Dollar figures generated from existing annual maintenance contracts and rough estimates of deferred maintenance needs. FR21, 21A, 21B, 58, 79, and 286 received approximately $190,000 of deferred maintenance work (gravel resurfacing and signing) in 2010 through Recovery Act funding.				

Trail based recreation activities are popular within the project area. There is a total of approximately 40.6 miles of managed trails, of which approximately 22.5 miles are under Forest Service jurisdiction and approximately 18 miles are under town or private landowner jurisdiction including 8 miles of Town of Dorset Legal Trails, and a .75 mile trail in Emerald Lake State Park (Table TA-6). There is no official data available for the level of use for trails in the Dorset Peru analysis area.

The Forest Service maintains a snowmobile trail network in cooperation with the Vermont Association of Snow Travelers (VAST) within the analysis area. There are approximately 24 miles of snowmobile trails where all 24 miles are Trail Class (TC) 4 groomed trails. The most highly used parking area to access snowmobile Corridor 7/ FT385 in the Dorset Peru area is VT 11/30. It is not unusual to see the trailhead at capacity on a nice winter day. Access also occurs from Emerald Lake State Park via Mad Tom Trail/FT 355. There is occasional access to Corridor 7 from Mad Tom Notch town snow plow turnaround.

There is approximately 11 miles of the Appalachian/Long Trail System (AT/LT) managed cooperatively with the Green Mountain Club. Hiking on the AT/LT System consists of overnight long-distance backpacking and day hiking. There are no other managed hiking trails on NFS lands. There are unmanaged hiking trails in the project area both on NFS lands and private lands. The East Dorset (old Mad Tom Trail) is approximately 4 miles long. The western terminus is located off Mad Tom Road in Dorset and traverses Dorset LT 10 which goes to NFS lands. The trail then follows the Mad Tom Brook and joins into FT 355. This trail was once a side trail to the Long Trail System but was abandoned as a managed trail. Dorset Mountain has over 10 miles of old skid roads and trails that are still used for hiking. This unmanaged trail system provides access to Dorset Peak and is listed in hiking books. The Dorset Town Plan lists other local trail systems that are partly or wholly on private land including from Dorset Hollow to East Dorset, from Dorset Village to Green Peak and Dorset Hollow and from Dorset Quarry to Owl's Head over Green Peak and to Squirrel Road. Hiking is allowed on all other FS trails within the project area. It is not uncommon to see summer trail users on the winter trail system

for access to the general forest area for hunting, viewing nature and gathering forest products (berries, etc.). FT 385 is also managed for horse and bike use.

Table TA-6. Dorset-Peru Travel Analysis Area Existing Public Trails

Trail Name	Trail #	Total Length	FS Jurisdiction, Miles	Local / other Jurisdiction, Miles	Trail Class	Designed* & Managed Uses	Desired ROS	Co-located with Road (Miles)
AT/LT	1	10.8	10.8	0	2	Hiker/ Pedestrian	SPNM From Rt11to Mad Tom notch Primitive within Peru Peak Wilderness SPM within the Robert T. Stafford White Rocks NRA	
Mad Tom	355	3.2	3.2		4	Snowmobile	SPM and Roaded Natural	
VAST Corridor 7	385	8.3	8.3		4	Snowmobile Pack and Saddle and bike	SPM and Roaded Natural	FR 21 for 1.9 mi. FR 58 for 2.06 miles
FR21	358	1.5	0	1.5 local on FR 21	4	Snowmobile	SPNM	FR21 local jurisdiction for 1.5 miles
Bromley Shelter Spur	455	0.0725	0.0725		3	Hiker/ Pedestrian	SPNM	
Bromley Brook Vista	456	0.0189	0.0189		2	Hiker/ Pedestrian	SPNM	
Vast Corridors 7F2 and 7F3		8		8		Snowmobile		
Emerald Lake State Park Vista Trail		.75		.75		Hike		
Dorset Legal Trails LT1		.3				Hike		
LT2		.1		.1		Hike		
LT3		.25		.25		Hike		
LT4		.1		.1		Hike		
LT5		.33		.33		Hike		
LT6		.95		.95		Hike		
LT7		.69		.69		Hike		
LT8		.97		.97		Hike		

LT9		.02		.02		Hike		
LT10		.3		.3		Hike		
LT11		.05		.05		Hike		
LT12		3.3		3.3		Hike		
LT13		.68		.68		Hike		
TOTAL		**40.59**						

Table TA-7 displays the annual operations and maintenance costs for the trail system, as well as the deferred maintenance costs. Deferred maintenance is defined as maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period. When allowed to accumulate without limits or consideration of useful life, deferred maintenance leads to deterioration of performance, increased cost to repair, decrease in asset value, potential resource impacts and possible decreases in visitor satisfaction of the trail system.

Table TA-7: Annual Operations & Maintenance (O&M) Costs and Deferred Maintenance Costs by trail.

Trail Number/Name	Managed Uses	Annual O&M	Deferred Maintenance	Trail Partner
AT/LT/ 1	Hiker/Pedestrian	$51,197.83	16,419.30	GMC/ATC
Mad Tom 355	Snowmobile	$4,373.74	10,428.58	VAST
FR21 358	Snowmobile	$1355.52	10,019.58	VAST
Corridor 7 385	Snowmobile/Pack and Saddle/bike	$8,715.62	57,810.28	VAST
Bromley Shelter Spur 455	Hiker/Pedestrian	$54.10	--	GMC/ATC
Bromley Brook Vista 456	Hiker/Pedestrian	$23.12	--	GMC/ATC
TOTAL		**$65,719.93**	**$94,677.74**	
Dollar figures generated from Trails INFRA Database. Data was collected during fall of 2011 after the August 2011 tropical storm Irene.				

ISSUES & ASSESSING BENEFITS, PROBLEMS, AND RISKS (Steps 3 & 4)

During the Dorset-Peru IRP project development, USFS staff held several public meetings to identify issues and opportunities for all resource areas including roads and trails. The Travel Analysis process was reviewed during these meetings and the public was specifically asked to comment on the existing system of roads and trails in the project area, and provide input into the process. Records and any notes from these meetings are available as part of the Dorset-Peru IRP project record.

Issues associated with management of Forest roads and trails in the project area identified from public and local government input and Forest Service management goals included:

- Improvement of roads and trails to provide better access for vegetation management and the general public for recreation and hunting
- Addition of trails in the Dorset Mountain area and from Dorset through the Mad Tom area into Peru
- Plan for Aquatic Organism Passage (AOP) on project area culverts

- Closure of NFS and unauthorized roads in the area to prevent unmanaged motorized use and promote better management of the Wilderness MA (5.1) and Remote Backcountry Forest MA (6.1)
- Access improvements for maintenance of existing and proposed wildlife openings
- Ancient Roads (Vermont Act 178)
- Review gate needs and repair and replace as needed
- Update road signing plans and roadside signing

A complete listing and content analysis of public comments on the Dorset-Peru IRP proposed action relating to Forest roads and trails will be available in the Dorset-Peru IRP Project document files.

GENERAL ISSUE STATEMENTS/QUESTIONS (FS-643 ROADS ANALYSIS GUIDE, 1999)

Some of the above issues are addressed in the following assessment of benefits, problems, and risks (please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 29-74 from which these standard set of general issue statements/questions came). Many may also to be addressed in the Dorset-Peru Integrated Resource Project Environmental Assessment and this Reports' list of Opportunities (Step 5) and Recommendations (Step 6).

Ecosystem Functions and Processes (EF)

EF (1): What ecological attributes, particularly those unique to the region, would be affected by roading / trailing of currently unroaded / untrailed areas?

No roading / trailing of currently unroaded (Roadless) areas are planned. Please reference the Forest-wide Roads Analysis Process Report, Step 4, pp 29-30. An Environmental Assessment is planned for the Dorset-Peru Travel Analysis project area which will address this question more specifically if relevant.

EF (2): To what degree does the presence, type, and location of roads / trails increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introductions to plant and animal species and ecosystem function in the area?

Any recommended activities would take necessary precautions according to Forest standards and guidelines to minimize the potential for contamination from outside sources. This includes, but is not limited to; road / trail construction, maintenance, and logging equipment. An Environmental Assessment is planned for the Dorset-Peru project area which will address specific road/trail proposed actions and this question more specifically if relevant.

EF (3): To what degree does the presence, type, and location of roads and trails contribute to the control of insects, diseases, and parasites?

Road and trail access facilitates human-conducted controls of pests, but is often not critical to the operation as much of it involves aerial applications. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 33-35.

EF (4): How does the road / trail system affect ecological disturbance regimes in the area?

Please reference the Forest-wide Roads Analysis Process Report, Step 4, p 35. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

EF (5): What are the adverse effects of noise, caused by developing, using, and maintaining roads / trails?

Noise from road construction, logging, and maintenance equipment can be distracting when present, but the infrequent and brief activities expected in the project area are not considered to present a significant adverse effect. Noise from long term maintenance for the small number and type of roads and trails on Forest land in this area will be negligible. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 35-36. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

Aquatic, Riparian Zone, and Water Quality (AQ)

AQ (1): How and where does the road / trail system modify the surface and subsurface hydrology of the area?

On most road and trail surface water is captured in ditches and transported to culverts or water bars, usually located in grade sags. When built properly and maintained regularly these provide little change to surface and subsurface hydrology on the type of terrain and road / trails within this project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (2): How and where does the road / trail system generate surface erosion?

Surface erosion and associated sedimentation are related to the effectiveness of road / trail design, construction, and maintenance. Insufficient road / trail maintenance is often accountable for disruptions in harmonious water/road and trail interaction. These disruptions lead to subsequent and more critical disruptions, sometimes resulting in sediment deposits to streams. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (4): How and where do road/trail-stream crossings influence local stream channels and water quality?

Several crossings over live water are noted to exist within the analysis area on Forest roads and trails. New crossings over live water would only occur during road/trail bridge or culvert construction or re-construction, and would be coordinated with approval of the State ANR. Any new permanent stream crossings over water will be designed to pass aquatic species. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (5): How and where does the road/trail system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides to enter surface waters?

Forest roads and trails within the analysis area pose negligible pollution potential. Forest roads are not typically open to public travel in the winter, are not salted, and do not typically transport commercial traffic (except for occasional timber sales). During construction, re-construction or maintenance activities there is a potential for oil and coolant spills, but these are of relatively small size and are mitigated by requirements of the construction or maintenance contract. An

Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (6): How and where is the road/trail system hydrologically connected to the stream system? How do the connections affect water quality and quantity?

Shorter runoff relief intervals ensure more dispersed runoff, which helps reduce channeling. Outsloped roads and trails are also an effective means of dispersal, but can present safety problems. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (7): What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road/trail-derived pollutants?

Many projects and changes in management techniques have been directed toward improving aquatic species habitat for more than a decade. Road maintenance activities have been adjusted to minimize the potential for siltation. Continued vigilance, adherence to Forest Plan standards and guidelines, and efforts to enhance water quality within the analysis area will ensure future enjoyment of its downstream beneficial uses. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (8): How and where does the road/trail system affect wetlands?

Wetlands exist in the analysis area. The Forest road system within the analysis area is not near enough to any identified large wetland areas that it would have a significant affect on them. Forest system roads are built and maintained to avoid effects on wetlands. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (9): How does the road/trail system alter physical channel dynamics, including isolation of floodplains; constraints on channel migration; and the movement of large wood, fine organic matter, and sediment?

Not an issue for this project. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 41. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (10): How and where does the road/trail system restrict the migration and movement of aquatic organisms? What aquatic species are affected, and to what extent?

This issue is being addressed in a forest-level program that has identified and prioritized barrier problems. Funding has been secured to begin the program to design and implement solutions to the problems. Some of these barriers have been identified within the analysis area (though they are not of the highest priority on the Forest). An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (11): How does the road/trail system affect shading, litter fall, and riparian plant communities?

Road maintenance activities are directed toward minimum disturbance of vegetation to meet maintenance objectives. This does not seem to be an issue within the analysis area. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 42. An Environmental

Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

AQ (12): How and where does the road/trail system contribute to fishing, poaching, or direct habitat loss for at-risk aquatic species?

This is not an issue within the analysis area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 42-43.

AQ (13): How and where does the road/trail system facilitate the introduction of non-native aquatic species?

This does not seem to be an issue within the analysis area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, p 43.

AQ (14): To what extent does the road/trail system overlap with areas of exceptionally high aquatic diversity or productivity, or areas containing rare or unique aquatic species or species of interest?

This is not an issue within the analysis area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 43-45.

Terrestrial Wildlife (TW)

TW (1): What are the direct effects of the road/trail system on terrestrial species habitat?

Assuming no new roads would be constructed in the project area, the majority of existing roads within the analysis area are gravel roads of narrow width and low use which would have a minimal impact on mortality due to roads, habitat fragmentation or movement of wildlife (other than possibly amphibians). US Route 7, State Routes 7A, 11/30 and some of the larger Town roads are wider, have higher traffic counts; and thus have the potential to cause higher mortality rates, modify wildlife movements, and/or contribute to habitat fragmentation. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 45-48.

TW (2): How does the road/trail system facilitate human activities that affect habitat?

The road system would facilitate increased activities such as timber harvesting during project implementation. The implementation has the potential to increase wildlife disturbance / displacement during the short term but would have minimal negative impacts over the long term. Recreational activities, mostly day use, is also facilitated by the road and trail system which also has the potential for creating seasonal or short term displacement of wildlife. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 45-48.

TW (3): How does the road/trail system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the effects on wildlife species?

Roads and trails allow access for hunters within the analysis area. While this is generally not an issue this access can be used for poaching. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 48-49.

TW (4): How does the road/trail system directly affect unique communities or special features in the area?

This is not an issue within the analysis area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 49-51.

Economics (EC)

EC (1): How does the road and trail system affect the agency's direct costs and revenues? What, if any, change in the road and trail system will increase net revenue to the agency by reducing cost, increasing revenue, or both?

See Tables TA-5 and 7 above. The annual road budget for the GMFL NF is currently sufficient to provide for the required annual maintenance of OpML 3-5 roads within the project area, but is insufficient to provide for annual maintenance on OpML 1-2 roads or complete any required deferred maintenance without supplemental funding. Fortunately the Forest received Recovery Act funding and completed approximately $190,000 worth of deferred maintenance on most all of the OpML 3-5 NFS roads within the project area in 2010. There are currently only 6.60 miles of NFS roads within the project area. Reducing this mileage to any significant degree would have a negative impact on potential revenue from timber sales while having only a minor affect on annual costs which are under $3,500 per year. The GMNF trails program has a well established history of partner groups assisting in operations and maintenance. Cost sharing on trail maintenance projects helps expand the capacity of normal GMNF trail maintenance appropriation dollars. There are opportunities to bring unmanaged trails with unknown levels of maintenance needs into the GMNF trail system. Bringing these trails onto the trail system would provide opportunities to add new partners to assist in maintaining trails in the Dorset Peru project area due to the existing use and popularity of these unmanaged trails.

EC (3): How does the road and trail system affect the distribution of benefits and costs among affected people?

Users of the trail system receive the direct benefits of the infrastructure. Currently the managed trail uses in the Dorset-Peru Analysis Area include hiking, biking, horseback riding, skiing, snowshoeing, and snowmobiling. The hiking and snowmobile communities currently assist in the cost of maintaining the system through partnerships with the Green Mountain Club and the Vermont Association of Snow Travelers. Both of these organizations rely heavily on volunteers to assist in trail maintenance activities. There currently no partnership with other user groups in the project area to assist with maintenance costs. The benefits enjoyed by these user groups come at a cost to their organizations to assist in maintaining the trail system.

Road based recreation users also benefit from the road system through access to the NF for activities such as hunting, fishing, gathering forest products, camping and enjoying scenery. These types of users do not normally assist in the operations and maintenance of the transportation system.

Timber Management (TM)

TM (1): How does road/trail spacing and location affect logging system feasibility?

Efficient and economical road spacing for ground based logging systems on terrain found in the project area utilize an average 1,500 to 2,500 feet skid distance to the farthest harvest unit in order to balance economical yarding cost with road density. In general, close road spacing results in quick turn times and higher production that reduces yarding cost and increases stumping value. Although closer road spacing can increase the total road cost due to more roads, this cost can be reduced with the use of temporary roads. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 52-53.

TM (2-3): How does the road system affect managing the suitable timber base and other lands? How does the road/trail system affect access to timber stands needing silvicultural treatment?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 53-54.

Minerals Management (MM)

MM (1): How does the road/trail system affect access to locatable, leasable, and salable minerals?

There are no known significant mineral deposits in the project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 54.

Water Production (WP)

WP (2): How does road/trail development and use affect water quality in municipal watersheds?

Municipal watersheds exist in the analysis area, and are very unlikely to be affected by the small number, location, and type of roads/trails and usage in the project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

Special Forest Products (SP)

SP (1): How does the road/trail system affect access for collecting special forest products?

Permits for collecting special forest products are issued to utilize the existing transportation system. Policy dictates that use of a closed road is permitted only if the objective of the closure is not compromised and the task cannot be otherwise accomplished. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 55-56.

Special-Use Permits (SU)

SU (1): How does the road/trail system affect managing special-use permit sites?

Special use permits have, and will continue to exist within the project area, but have not typically been an issue relative to the Forest road/trail system. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, p 56.

General Public Transportation (GT)

GT (1): How does the road/trail system connect to public roads and primary access to communities?

None of the NFS roads in the analysis area directly connect the two communities of Dorset and Peru. Access between the two towns depends on State Highways 11/30.

The winter trail network in the analysis area does provide access across NFS lands between the communities of Dorset, Peru and Winhall. FS Trail 385 serves as VAST Corridor 7, and FS trails 355 and 358 serve as VAST Corridor 7F2 that connect the three communities together. Users of this trail system enjoy the benefits of traveling a very scenic route and accessing services such as gas and food along the way in the different communities. The AT/LT connects Winhall and Peru with areas of the GMNF to the north and south. An unmanaged trail connects the AT/LT with Dorset.

GT (2): How does the road/trail system connect large blocks of land in other ownerships to public roads?

There are no NFS roads within the project area connecting lands in other ownerships to NFS or other public roads. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 57.

The VAST trail system connects to large blocks of private and other public lands to the west via VAST Corridor 7F2. Snowmobile users enjoy this access that connects to the larger state-wide snowmobile trail network. The connection of communities, private lands, other public lands and the GMNF provide a diverse riding experience. The AT/LT also connects hikers to other large blocks of private and public land north and south along the spine of the Green Mountains. Unmanaged trails connect NFS lands and the AT/LT with private lands and Emerald Lake State Park.

GT (3): How does the road/trail system affect managing roads with shared ownership or limited jurisdiction?

The Forest Service has full jurisdiction on all National Forest System (NFSR) roads within the analysis area except possibly for NFSR 285 which is also noted as Dorset Town Legal Trail #8. Other numbered Forest roads and Forest Highways are under Town jurisdiction. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 57-59.

The Dorset-Peru analysis area has approximately 41 miles of recreation trails, of which 18 miles are located on town or other private land jurisdiction. The GMNF trail partners primarily develop and cultivate the verbal agreements for crossing those non-GMNF travel routes. The FS has an easement to cross private land in Dorset and FT 355 is located in this easement area on private land. There are no formal agreements between the GMNF, partner organization or towns to operate and maintain the trail system on non-NFS lands. The towns generally support the trail

activities on their Class 4 roads and trails for economic develop and quality of life opportunities and access can be counted on for the long term.

GT (4): How does the road/trail system address the safety of road users?

The largest concern for safety in the analysis area is the concurrent use of snowmobiles and automobiles on the same travel route. Currently there are no instances of this on NFS managed lands. FS Trail 385, VAST Corridor 7 and FS Trail 1, AT/LT both cross Vermont Routes 11/30. These road crossing can be hazardous for both the trail user and the road user. Forest roads at OpML 3-5 are managed and maintained to highway safety act requirements. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 59-60.

Administrative Use (AU)

AU (1): How does the road/trail system affect access for research, inventory, and monitoring?

Road closures within the analysis area have been in place for a decade or more. Research, inventory, and monitoring practices adhere to the policy on administrative use of closed roads. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, pp 60-61.

AU (2): How does the road/trail system affect investigative or enforcement activities?

Unauthorized uses associated with summer off-road vehicles and snowmobiles have been said to occur in the Dorset-Peru area, although the GMNF has no data as to what extent. Field inspections and conversation with Forest Service law enforcement indicate that unauthorized motorized activity in the Dorset-Peru area is incidental and not considered a 'hot spot' for illegal motorized activity on the GMNF. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 61.

Protection (PT)

PT (1): How does the road/trail system affect fuels management?

Not an issue for this project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 61.

PT (2): How does the road/trail system affect the capacity of the Forest Service and cooperators to suppress wildfires?

Not an issue for this project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 61.

PT (3): How does the road/trail system affect risk to firefighters and to public safety?

Not an issue for this project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 62.

PT (4): How does the road/trail system contribute to airborne dust emissions resulting in reduced visibility and human health concerns?

Not an issue for this project area. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. Please also reference the Forest-wide Roads Analysis Process Report, Step 4, p 62.

Unroaded Recreation (UR)

UR (1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

According to the latest Recreation Opportunity Spectrum inventory, there are 5,362 acres of semi-primitive non-motorized opportunities on NFS lands within the analysis area. That accounts for 36% of NFS lands in the analysis area, where most of this is located within the Big Branch and Peru Peak Wilderness Areas and the Dorset Mountain area. There is no evidence that shows there is an excess supply or demand for unroaded recreation opportunities.

UR (2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing road causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities?

There are no needs to develop new roads into unroaded areas. Managing additional uses such as bicycles and horses on the existing trail system outside of wilderness will provide additional unroaded recreation opportunities. These will not result in substantial changes to unroaded recreation opportunities.

UR (3): What are the effects of noise and other disturbances caused by developing, using, and maintaining roads on the quantity, quality, and type of unroaded recreation opportunities?

Currently, noise from the road system does not substantially affect unroaded recreation opportunities. The areas most affected by road noise are the Big Branch Wilderness Area and the Dorset Mountain area on either side of VT 7. Visitor seeking an experience away from the sights and sounds of modern life may have to travel deeper into these areas away from this highway corridor. The noise generated by the snowmobile trail network in the project area also affects unroaded recreation opportunities. Visitors seeking experiences away form the sights and sounds of the combustible engine will have to travel further into the unroaded portions of the area.

UR (4): Who participates in unroaded recreation in the areas affected by constructing, maintaining, and decommissioning roads?

The primary users of the unroaded portions of the analysis area include hikers, skiers and hunters.

UR (5): What are these participants' attachments to the area, how strong are there feelings, and are alternative opportunities and locations available?

There is a strong attachment by the public to the wilderness areas within the analysis area. Congressionally designated wilderness provides opportunities for natural processes to dominate

the landscape and primitive recreation with solitude. Roads are not allowed to be constructed in wilderness. The AT/LT traverses the Peru Peak Wilderness and is a popular hiking trail. Dorset mountain is also a popular hiking trail for local residents and day hikers

Road-Related Recreation (RR)

RR (1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

The inventoried ROS analysis for the project areas shows that 6,656 acres (45%) of NFS land is in the Roaded Natural and Rural ROS classes. Roaded recreation opportunities are popular along Forest Roads 21, 58 and other access points from town roads. Roaded recreation opportunities typically include hunting, camping and viewing scenery. There is no evidence to suggest that there is excess supply or demand of roaded recreation opportunities within the analysis area.

RR (2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing road causing substantial changes in the quantity, quality, or type of roaded recreation opportunities?

No. There has been very little new road construction activity on the Forest within the past 10 years. Neither have maintenance levels changed over this period of time, and few roads have been decommissioned.

RR (3): What are the effects of noise and other disturbances caused by developing, using, and maintaining roads on the quantity, quality, and type of roaded recreation opportunities?

Not an issue as there has been little to no activity in the past and any future activity will be minor. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 66-67.

RR (4): Who participates in roaded recreation in the areas affected by constructing, maintaining, and decommissioning roads?

Roaded recreation within the analysis area consists mostly of hunting, snowmobiling, viewing scenery, and camping. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 67-69.

RR (5): What are these participants' attachments to the area, how strong are there feelings, and are alternative opportunities and locations available?

Recreation users of the area have a strong attachment to the land. They have relied on the road access for generations to pursue activities such as hunting and camping. Reducing the size of the road system would impact those users who have grown to depend on it for their quality of life.

Civil Rights (CR)

CR (1): How does the road and trail system or its management, affect certain groups of people (minority, ethnic, cultural, racial, disabled, and low-income groups)?

The existing road and trail system provides opportunities for all racial, ethnic and income groups. The trail system in the area does not have any facilities specifically designed to provide access for those with disabilities.

Passive-Use Value (PV)

PV (1): Do areas planned for road/trail entry, closure, or decommissioning have unique physical or biological characteristics, such as unique natural features and threatened or endangered species?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, p 70.

PV (2): Do areas planned for road/trail entry, closure, or decommissioning have unique cultural, traditional, symbolic, sacred, spiritual, or religious significance?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 70-71.

PV (3): What, if any groups of people hold cultural, symbolic, spiritual, sacred, traditional, or religious values for unroaded/untrailed areas planned for road/trail entry or road/trail closure.

To date, such values have not been specifically identified. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

Social Issues (SI)

SI (1): What are the people's perceived needs and values for roads / trails? How does the road / trail management affect people's dependence on, need for, and desire for roads/trails?

People have grown to depend on and value the trail network within the analysis area. Many of the trails have been established through the years by volunteer user groups such as VAST and GMC. There is a perceived need to enhance hiking, biking and horseback riding opportunities in the analysis area by managing some of the unmanaged trails and adding uses to existing trails. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically for the road network if relevant.

SI (2): What are the people's perceived needs and values for access? How does the road management affect people's dependence on, need for, and desire for access?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 71-72.

SI (3): How does the road/trail system affect access to paleontological, archaeological, and historical sites?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, p 72.

SI (4): How does the road/trail system affect cultural and traditional uses, and American Indian treaty rights?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, p 72.

SI (5): How are roads/trails that are historic sites affected by road management?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report, Step 4, pp 72-73.

SI (7): What is the perceived social and economic dependency of a community on an unroaded area versus the value of that unroaded area for its intrinsic existence and symbolic values?

This question is more appropriately addressed at the Forest scale. See the Forest-wide Roads Analysis Process Report, Step 4, pp 73-74. An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant.

SI (8): How does road and trail management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation?

An Environmental Assessment is planned for the Dorset-Peru project area which will address this question more specifically if relevant. See also the Forest-wide Roads Analysis Process Report.

OPPORTUNTIES AND PRIORITIES (Step 5)

Summary, Opportunities, and Remarks

Based on the existing and desired road and trail system conditions and issues derived from public and internal Forest Service meetings, the following sets of opportunities were developed (opportunities are not exclusive of each other):

I. Existing National Forest System Roads (NFSR)

Road	Opportunities for consideration
NFSR 21	Keep at OML 3 (2.83 miles) and maintain to highway safety act standards. Change to OML 2 beyond main destination point such as vista or trailhead. Create trailhead parking area for possible new hiking trail to Dorset at mile 2.8. Install new gate at end of Town road -just east of FR58 intersection, to protect NFSR 21 & 58 road surfaces during late winter and mud season. Improve or replace larger culvert pipes carrying live streams to allow aquatic organism passage.

NFSR 21A: Keep at OML 3 (0.02 miles) and maintain to highway safety act standards.
Double size of parking area to accommodate future expected increased use.

NFSR 21B: Keep at OML 3 (0.02 miles) and maintain to highway safety act standards.
Increase size of parking area by 50% to accommodate future expected increased use and increase turning area for snowmobile trailers.

NFSR 58: Keep at OML 3 (2.07 miles) and maintain to highway safety act standards.
Double size of parking area at trailhead to accommodate future expected increased use.
Improve or replace larger culvert pipes carrying live streams to allow aquatic organism passage.

NFSR 79: Keep at OML 2 (0.10 miles) and maintain to 4wd / high-clearance standards.
Change to OML 3 and improve / maintain at highway safety act standards.
Remove one curb-cut / entrance from FR 22 North Road (Town Highway 4) and shorten road accordingly.

NFSR 283: Keep at OML 1 (0.50 miles) and perform custodial maintenance (road will need to be located and laid-out as precise R/W location is currently undetermined). Road provides potential access to Compartment 50 for forest management activities.
Decommission as NFSR but retain R/W to US Tract 41 (Compartment 50) for possible future access needs (establishing where R/W is located).
Change to OML 3 and improve / maintain at highway safety act standards locating trailhead and parking area for potential new trail from Peru at NFSR 21 (road will need to be located and laid-out as precise R/W location is currently undetermined).

NFSR 285: Keep at OML 1 (1.00 miles) and perform custodial maintenance (note NFSR 285 R/W is shared with Dorset Town Legal Trail 8). Road provides potential access to Compartment 57 for forest management activities though clearance through tunnel under US 7 does not allow for use of log trucks.
Decommission as NFSR but retain all R/W rights to US Tract 64 and Compartment 57 for possible future access needs.

NFSR 286: Keep at OML 3 (0.06 miles) and maintain to highway safety act standards. Road provides potential access to Compartment 63 for forest management activities.
Increase size of parking area by 50% to accommodate future expected increased use.

II. Existing Non-NFS Roads on USFS land or off NFS roads

Road	Opportunities for consideration
21S-1.661:	Use existing road and R/W to US Tract 31/31b as temporary administrative access to Compartments 56 and 62 and physically close at FR 21 (TH # Mad Tom Notch Road) upon conclusion of use.

Improve and add this existing road to the NFS as a 0.60 mile long OML 1 road (NFSR 21C) for important access to Compartments 56 and 62 for creation and maintenance of wildlife openings. Install road gate near FR21.
Improve barrier / closure at FR 21 to prevent unauthorized motorized access.

21N-1.734: Improve barrier / closure and signing at FR 21 (TH # Mad Tom Notch Road) to continue to prevent unauthorized motorized access to Peru Peak Wilderness MA to the north.

258N-0.420 Use existing road as temporary administrative access to compartment 62 and physically close at end of FR 258 (TH 18 Pierce Road) upon conclusion of use.
Improve and add this existing road to the NFS as a 0.50 mile long OML 1 road (NFSR 258) for important access to Compartment 62 for creation and maintenance of wildlife openings. Install road gate north of TH 18 end.
Improve barrier / closure at end of FR 258 (TH 18) to prevent unauthorized motorized vehicle access.

284E-0.300 Use existing road as temporary administrative access to Compartments 57 and 58 and physically close at end of FR 284 (Legal Trail 10) upon conclusion of use.
Improve and add this existing road to the NFS as a 0.10 mile long OML 3 road (NFSR 284) for access to Compartment 57 and 58 and for possible creation of a trail head and parking for potential new trail from Peru at NFSR 21.
Improve barrier / closure at FR 284 (LT 10) to prevent unauthorized motorized vehicle access.

Various: Any other non-NFS (unauthorized) roads and trails discovered on Forest lands within the project area during subsequent Environmental Assessment review or implementation shall be closed unless otherwise designated. Closure of any unauthorized roads and skid trails would be at or near the main road entrance by: placing large boulders (or similar physical barrier); re-planting some native vegetation; and re-establishing the main road template and / or ditch-line as needed. Until the vegetation is established small, temporary travel management signing may be installed to discourage unauthorized use. Small single car pull-off areas may be created (when needed) at existing unauthorized road entrances where the pull-off can be located by extending the shoulder of the main road (without cuts or fills) and where they will not be separated by ditches or drainage structures.

III. Temporary Haul Roads to existing or new timber landings proposed for the Dorset-Peru Project

Road	Opportunities for consideration
Various:	There is an opportunity to construct temporary short haul roads to new and existing landings to provide access for timber management (see existing and proposed landings on Dorset-Peru IRP Project map). Most all of these roads are short (<0.10 miles), would not require gravel, and would likely be used primarily under frozen

ground conditions. Previously used temporary roads may need to be reopened to access existing landing locations that meet current standards for use. Temporary roads would be restored to pre-sale conditions after use according to Forest Plan Standards and Guidelines as a part of the timber sale to prevent unauthorized motorized vehicle use. Skid roads leading from these temporary roads and log landings would be closed off at the completion of harvest activities to prevent unauthorized motorized vehicle use into the Forest.

IV. Easements & R/W's and Access Needs from State, Town, and Other Roads

R/W Access	Opportunities for consideration
Various:	All existing Easements and R/W's to US Tracts would remain intact within the project area as well as any Encumbrances (see Appendices A-2 & 3 for copies of R/W Status Atlas sections –maps and tabular data, and survey plats relevant to the project area).
US Tract 6	Dorset: Approx. milepost 2.78 (east side) off FR 259 (TH 5). GMNF Road R/W Status Atlas Dorset –Line 24 (from Connors). Existing road and US Appurtenant Easement No. 1 to US Tract 6 over Parsons 62/23 (24 March 1947 Dorset Book 37, Page 98). Easement is over private lands to US Tract 6 which is part of Big Branch Wilderness. There is a desire to establish a short section of NFS road to trail head parking but this is unlikely due to limited R/W width and the fact it appears to end in a Wilderness parcel.
US Tract 41	Dorset: Approx. milepost 1.10 (east side) off FR 259 (TH 5). GMNF Road R/W Status Atlas Dorset –Tabular Data Line 29 (from Copping). An existing US Appurtenant R/W over Copping to US Tract 41 (Book 29, Page 382 of Dorset Land Records). This is the location of NFSR 283 therefore see *Section I* discussion above for opportunities.
US Tract 64	Dorset: Tennis Way (LT 8) east off of VT 7A in Dorset. GMNF Road R/W Status Atlas Dorset –Tabular Data Line 6 (over Forrest to US Tract 64). A 66 ft wide x 5,674.9 ft. long + log landing (1/2 acre) and rights to use gravel to repair road. This is the location of NFSR 285 and Dorset Town LT 8 therefore see *Section I* discussion above for opportunities.
US Tract 271	Dorset: The following Appurtenant Easements for Ingress / Egress as per GMNF Survey Plats dated 12/7/1992 and 11/9/2009: 1. Swezey Lumber Company from John C. & Susan Kent Hubbard dated 8 June 1959 and recorded in Book 44, Page 71 of the Dorset Land Records. "…travel over and along a certain existing wood road, which runs northerly from the old marble quarry and passes westerly of a corner marked M.L.#9". 2. Webster and Melville reserved a 50 foot right of way in the deed to John and Martha Merwin dated 9 May 1984 and recorded in Book 61, Page 416 of the

Dorset Land Records running west to east through Lot "B-4". Consider for use as access point for hiking trail head for Dorset Mountain area.

3. Webster and Melville from Dorset Hollow Corp. dated 29 Dec. 1978 and recorded in Book 53, Page 345 of the Dorset Land Records. "A 50 foot right of way over a triangular shaped piece of land on the east side of Town Highway #10" at the northwest corner of land now owned by Batzel. Consider for use as access point for hiking trail head for Dorset Mountain area.

4, 5 & 6. Webster and Melville from Dorset Hollow Corp. dated 29 Dec. 1978 and recorded in Book 53, Page 345 of the Dorset Land Records. "Three 18 foot right of ways along the existing timber roads running northerly and westerly from Town Highway #10 to lands of the Grantee".

7. Webster and Melville from First Vermont Bank & Trust Company dated 26 Jan. 1979 and recorded in Book 53, Page 364 of the Dorset Land Records. "A 50 foot right of way crossing Lot "D" and designated as Baldwin Hill Road", running from T.H. #8 southeasterly to the intersection of Dorset Mt. Road and Baldwin Hill Road.

US Tract 31 Peru: Approx. milepost 1.66 (south side) off FR 21 Mad Tom Notch Road. GMNF Road R/W Status Atlas Peru –Tabular Data Line 15 (from White to US Tracts 31/31b). A 66 ft. wide R/W for FR 258 Morris Brook Road. This aligns with Road 21S-1.661 noted above in *Section II* therefore see that section for opportunities under consideration.

US Tract 27 Peru: Southwest of end of FR 258 (TH 18) Pierce Road. GMNF Road R/W Status Atlas Peru –Tabular Data Line 27 FR 258 Morris Brook Spur SE ¼ Lot 10 Range 4 (from Taylor). Triangular shape contains 0.20 acre at SE ¼ of lot. For opportunities under consideration see *Section II* above under Road 258N-0.420.

US Tract 63 Winhall: At end of Winhall TH 72 milepost 0.07 triangular section of land off end of TH 72 providing access to US Tract 63 and adjoining tracts. Consider temporary or permanent administrative access haul road for accessing Compartments 59, 60, and 63 depending on forest management or wildlife needs.

Access needs Opportunities for consideration

US Tract 214 Also US Tracts 463 & 485 in Compartment 57. There is currently no clear access to these tracts in Towns of Dorset and Manchester. Research indicates the best opportunity for access to these parcels would be via Beech Ridge Road which crosses US 7 heading east then turning northeast crossing US Tract 214 and 463, then runs north on the east side of US Tract 485.

US Tract 394 These are actually US Tracts 394b & c in Compartment 39. Consider temporary access from FR 259 (TH 5) Mad Tom Road in Dorset for access into Compartment 39. This would require curb-cut permit from Town of Dorset.

Various: There is an opportunity to better understand private land access over US Government lands or roads and initiate or renew any needed Road Use or Special Use Permits. Areas to consider for review are:

Private lands off of FR 258 (TH18) Pierce Road near US Tract 27
Private lands in SE corner of Dorset near US Tracts 30, 63, 214, 463, & 485

Various: There are opportunities for improved access to National Forest lands over new permanent or temporary access permits (easements) at the following areas:

Off Dorset TH XX near the XXX intersection for access to CXX (SX)

Town Hwys Opportunities for consideration

Dorset TH's: There is an opportunity to enter into a Road Cooperative Agreement with the Town of Dorset to possibly include FR 284 (LT 10), and TH 10, 15 , and LT 12. Depending on any proposals for new trails or trail heads and parking it may be in the interest of both the Forest Service and the Town to cooperate on any associated road improvement or maintenance needs. There is has never been a Road Cooperative Agreement with Dorset according to Forest Service records.

Peru TH's: There is an opportunity to improve FR21 (TH X) Mad Tom Notch Road and FR 258 (TH 18) Pierce Road through the existing Road Cooperative Agreement with the Town of Peru to reduce soil erosion and any unauthorized off-road 4 wheel drive and ATV activity and provide for timber and wildlife management access to NFS lands in Compartments 56, 58, 60, 61, 62, and 63. Improvements, with Town approval, could include spot graveling, road template shaping, water bar, culvert, and ditching work, brushing, and other similar road maintenance activities. The Forest Service currently has a Road Project Agreement through Recovery Act funding to place gravel and grade sections of the Town portion of FR 21 Mad Tom Notch Road during the summer of 2011.

V. Existing National Forest System Trails

NFST 1 AT/LT - retain the existing trail.

NFST 355 Mad Tom Trail – Retain the existing trail and explore opportunities to add uses such as mountain biking to the trail.

NFST 358 FR 21 - Retain the existing trail

NFST 385 – Retain the existing trail and improve trail maintenance and conditions for horse and bike use.

NFST 455 Bromley Shelter Spur - Retain the existing trail

NFST 456 Bromley Brook Vista - Retain the existing trail

VI. Existing Unmanaged National Forest System Trails

Unmanaged trails Opportunities for consideration
Dorset Mountain – There is an opportunity to: develop a trailhead at the Grouse Lane access, develop a National Forest System switchback trail designed and managed for mountain bike and hike/pedestrian use from Grouse Lane trailhead to the existing unmanaged eastern ridge trail, add the existing unmanaged eastern ridge trail to the NFS trail system, maintain and improve the eastern ridge trail as needed for mountain bike and hike/pedestrian use, add the existing unmanaged trail to the little Dorset Peak outlook to the NFS trail system, relocate the unmanaged trail out of the streambed and wet areas, and maintain and improve the trail as needed for hike/pedestrian use. There is an opportunity to close and restore the unmanaged trail on the west side of Dorset Mountain.

Emerald Lake Connector – There is an opportunity to develop a National Forest System trail designed and managed for hike/pedestrian use from the trail on the eastern lands of Emerald Lake State Park to FT 355.

East Dorset Trail – There is an opportunity to: add the existing unmanaged East Dorset trail to the NFS trail system, maintain and improve this trail including relocations as needed for hike/pedestrian use, develop a trailhead adjacent to the town trail off of Mad Tom Road, and develop a trailhead on FR 21 Adjacent to FT 355.

RECOMMENDATIONS (Step 6)

Identification of needed and unneeded roads and trails within the analysis area.

The following tables (Tables TA-8 and TA-9) show existing and proposed NFS roads and trails and recommendations for their status, classification, and maintenance level based on the existing conditions on the ground; transportation needs in the project area; consideration of scoping issues; and assessment of benefits, problems, and risks.

Table TA-8 NFS Road System Review and Recommendations

ROAD ID	ROAD NAME	CURRENT ROAD SYSTEM & OpML	POST-ANALYSIS ROAD SYSTEM & OpML RECOMMENDATION	Miles	Objective Maintenance Level (OML)
NFSR 21	Mad Tom	National Forest System Road (NFSR) OML 3	National Forest System Road (NFSR) OML 3 and OML 2	0.15 2.68	3 2
NFSR 21A	Mad Tom AT/LT Parking	National Forest System Road (NFSR) OML 3	National Forest System Road (NFSR) OML 3	0.02	3
NFSR 21B	Mad Tom Winter Parking	National Forest System Road (NFSR) OML 3	National Forest System Road (NFSR) OML 3	0.02	3
NFSR 21C	Mad Tom Spur	Existing unauthorized road 21S-1.661	National Forest System Road (NFSR) OML 1	(+0.60)	1
NFSR 58	Staples Brook	National Forest System Road (NFSR) OML 3	National Forest System Road (NFSR) OML 3	2.07	3
NFSR 79	Hapgood Pumphouse	National Forest System Road (NFSR) OML 2	National Forest System Road (NFSR) OML 3	0.10	3
NFSR 258	Morris Brook	Existing unauthorized road	National Forest System	(+0.50)	1

		258N-0.420	Road (NFSR) OML 1		
NFSR 283	Mad Tom Brook North	National Forest System Road (NFSR) OML 1	Decommission entire length	(-0.50)	-
NFSR 284	Mad Tom Brook	Existing unauthorized road 284E-0.300	National Forest System Road (NFSR) OML 3	(+0.10)	3
NFSR 285	Little Mad Tom	National Forest System Road (NFSR) OML 1	Decommission entire length	(-1.00)	-
NFSR 286	Bromley Parking	National Forest System Road (NFSR) OML 3	National Forest System Road (NFSR) OML 3	0.06	3
NFSR 461	Dorset Hollow	Appurtenant Easement #2 and 3 of US Tract 271	National Forest System Road (NFSR) OML 3	0.30	3
			Total NFSR miles added: Total NFSR miles adjusted / decommissioned:	+1.50 -1.50	
			Net mileage change: Total NFSR Miles Post-Analysis:	0.00 6.60	

Table TA-9 NFS Trail System/Classification Review and Recommendations

Trail Name Trail Type	Trail Number	Current Condition			Post Analysis Recommendation			
		Current Length (miles)	Trail Class	Existing Uses	TMO Length (miles)	Trail Class	Designed Use	Managed Uses
AT/LT	1	10.8	2	Hike/ pedestrian	10.8	2	Hike	Hike/ pedestrian
Mad Tom	355	3.2	4	Snowmobile	3.2	4	Snowmobile	Snowmobile
FR 21	358	1.5	4	Snowmobile	1.5	4	Snowmobile	Snowmobile
VAST Corridor 7	385	8.3	4	Snowmobile, mountain bike	8.3	4	Snowmobile	Snowmobile, mountain bike
Bromley Shelter Spur	455	0.0725	3	Hike/ pedestrian	.0725	3	Hike	Hike
Bromley Brook Vista	456	0.0189	2	Hike/ pedestrian	0.0189	2	Hike	Hike
Grouse Lane – non-system trail and trailhead	None	1.5	None	Hike/ pedestrian	3.3	3	Hike/ pedestrian, mountain bike	Hike/ pedestrian, mountain bike
Dorset Mountain - non-system trail	None	7.43	None	Hike/ Pedestrian, unauthorized snowmobile	3.4	3	Hike/ pedestrian, mountain bike	Hike/ pedestrian, mountain bike
Emerald Lake Connector – proposed new trail	None	0	None	NA	0.678	2	Hike/ pedestrian	Hike/ pedestrian
East Dorset - non-system trail	None	3.1	None	Hike/ pedestrian	3.1	3	Hike/ pedestrian	Hike/ pedestrian
Total Miles		35.92			34.37			

Identification of road and trail associated environmental and public safety risks.

Road associated environmental and public safety issues and risks are identified throughout the previous discussions (particularly starting with Steps 3 & 4). Environmental and public safety risks are to be identified in more detail in the Dorset-Peru Environmental Assessment. Any roads that are to be physically closed upon completion of administrative use should be closed with the following design criteria in mind:

Temporary haul or skid roads and other identified unauthorized roads will also be closed off to further motorized use after any activities during project implementation. Access will be restricted at or near the main road entrance by placing large boulders (or similar physical barrier), re-planting some native vegetation, and re-establishing the main road template and / or ditchline as needed. Until the vegetation is established small, temporary travel management signing may be installed to discourage unauthorized use. Small single car pull-off areas will be created (as

needed for dispersed recreation at temporary or unauthorized road entrances where pull-off can be located by extending the shoulder of the main road (without cuts or fills) and where they will not be separated by ditches or drainage structures. Law enforcement will monitor the various project locations for illegal use. Road closures with gates or boulders or other restrictive devices will be placed to provide at least 32 inches and no more than 36 inches of clear passage around or through the device to ensure that a person who uses a wheelchair can get beyond the man made barrier but restrict unauthorized motorized vehicles.

The primary environmental concerns with the trail system are associated with erosion and sedimentation in water bodies, the spread of non-native invasive plants and unauthorized motorized use of unmanaged trails. Maintenance and improvement activities mitigate risks to these environmental concerns by constructing and maintaining erosion control structures such as water bars and ditches and hardening trail surfaces through wet areas. Some unmanaged trails are proposed to be added to the FS system and will be maintained and improved to decrease risks of erosion and sedimentation. Actions mitigating the spread of NNIS include washing trail maintenance equipment prior to and after activities on the trails. There is also an effort to educate users about the spread of NNIS through seed dispersal on boots, bicycle tires and equestrian activities. An inventory and future monitoring of newly designated horse and bike trails in the project area was implemented in 2010. Unmanaged trails and other identified unauthorized roads will also be closed off to further motorized use. Access will be restricted at or near the NFS lands boundary by placing large boulders (or similar physical barrier). Trail closures with gates or boulders or other restrictive devices will be placed to provide at least 32 inches and no more than 36 inches of clear passage around or through the device to ensure that a person who uses a wheelchair can get beyond the man made barrier but restrict unauthorized motorized vehicles.

Identification of site-specific priorities and opportunities for road and trail improvements and decommissioning.

Please see the previous discussions under the opportunities and recommendations for needed and unneeded roads and trails within the project area. Needed improvements were identified on several roads. Opportunities were identified for road decommissioning for a small number of Forest jurisdiction roads within the project area.

Opportunities listed under Opportunities and Priorities (Step 5) for existing or new NFS roads are recommended for implementation as follows:

Road	Recommendation (opportunities for NFS Road changes)
NFSR 21	Change to OML 2 beyond main destination point such as vista or trailhead. Create trailhead parking area for possible new hiking trail to Dorset at mile 2.8. Install new gate at end of Town road -just east of FR58 intersection, to protect NFSR 21 & 58 road surfaces during late winter and mud season. Improve or replace larger culvert pipes carrying live streams to allow aquatic organism passage.

NFSR 21A: Keep at OML 3 (0.02 miles) and maintain to highway safety act standards, doubling size of parking area to accommodate future expected increased use.

NFSR 21B: Keep at OML 3 (0.02 miles) and maintain to highway safety act standards, increasing size of parking area by 50% to accommodate future expected increased use and increase turning area for snowmobile trailers.

NFSR 21C: Improve and add this existing road (21S-1.661) and R/W to US Tract 31/31b to the NFS as a 0.60 mile long OML 1 road for important access to Compartments 56 and 62 for creation and maintenance of wildlife openings. Install road gate near FR21.

NFSR 58: Keep at OML 3 (2.07 miles) and maintain to highway safety act standards, doubling size of parking area at trailhead to accommodate future expected increased use. Improve or replace larger culvert pipes carrying live streams to allow aquatic organism passage.

NFSR 79: Change to OML 3 and improve / maintain at highway safety act standards, removing one curb-cut / entrance from FR 22 North Road (Town Highway 4) and shortening road accordingly.

NFSR 258: Improve and add this existing road (258N-0.420) to the NFS as a 0.50 mile long OML 1 road (NFSR 258) for important access to Compartment 62 for creation and maintenance of wildlife openings. Install road gate north of TH 18 end.

NFSR 283: Decommission as NFSR but retain R/W to US Tract 41 (Compartment 50) for possible future access needs (establishing where R/W is located).

NFSR 284: Improve and add this existing road (284E-0.300) to the NFS as a 0.10 mile long OML 3 road (NFSR 284) for access to Compartment 57 and 58 and creation of a trail head and parking for potential new trail from Peru at NFSR 21. Block off road east of new parking area to prevent unauthorized motorized vehicle access.

NFSR 285: Decommission as NFSR but retain all R/W rights to US Tract 64 and Compartment 57 for possible future access needs.

NFSR 286: Keep at OML 3 (0.06 miles) and maintain to highway safety act standards, increasing size of parking area by 50% to accommodate future expected increased use.

NFSR 461: Add a new road to the NFSR to the Dorset Mountain area (US Tract 271) off of Dorset Town Highway 10 (Dorset Hollow-Tower Road) via existing Appurtenant Easements 2 and 3 (see *Section IV* above). Construct parking area/trail head at end of this road on government lands for public access to proposed trails. The road would be built to OML 3 requirements and would be approximately 0.30 miles long.

Access Recommendation (opportunities for access improvements and cooperation)

US Tract 63: Implement temporary access off of end of Winhall TH 72 for access to Compartments 59, 60, and 63.

US Tract 214: Pursue permanent R/W access to US Tracts 214, 463, and 485 in Compartment 57 via Beech Ridge Road (a private road).

US Tract 394: Pursue curb-cut permit from Town of Dorset off of FR 259 (TH 5) Mad Tom Road for access to US Tracts 394b & c in Compartment 39.

Various: Better understand private land access over US Government lands or roads and initiate or renew any needed Road Use or Special Use Permits. Areas to consider for review are:

Private lands off of FR 258 (TH18) Pierce Road near US Tract 27
Private lands in SE corner of Dorset near US Tracts 30, 63, 214, 463, & 485

Various: Improve access to National Forest lands over new permanent or temporary access permits (easements) at the following areas:

Off Dorset TH XX near the XXX intersection for access to CXX (SX)

Dorset TH's: Enter into a Road Cooperative Agreement with the Town of Dorset to possibly include FR 284 (LT 10), and TH 10, 15 , and LT 12. Depending on any proposals for new trails or trail heads and parking it may be in the interest of both the Forest Service and the Town to cooperate on any associated road improvement or maintenance needs.

Peru TH's: Improve FR21 (TH X) Mad Tom Notch Road and FR 258 (TH 18) Pierce Road through the existing Road Cooperative Agreement with the Town of Peru to reduce soil erosion and any unauthorized off-road 4 wheel drive and ATV activity and provide for timber and wildlife management access to NFS lands in Compartments 56, 58, 60, 61, 62, and 63. Improvements, with Town approval, could include spot graveling, road template shaping, water bar, culvert, and ditching work, brushing, and other similar road maintenance activities.

Please see the previous discussions under the opportunities and recommendations for trails within the project area. Needed improvements were identified on several trails. Opportunities were identified for trail development for a number of unmanaged Forest jurisdiction trails (10.48 miles) within the project area.

Trail	Recommendation (opportunities for decommissioning or improvements)
NFST 1	Appalachian National Scenic Trail (10.8 miles): Continue to operate and maintain Class 3 Terra Trail designed and managed for hiker/pedestrian. Improve erosion control and trail tread in wet areas with puncheon.
NFST 355	Mad Tom Trail (3.2 miles): Continue to operate and maintain as a Class 3 Snow Trail designed and managed for snowmobile use. No changes recommended.

NFST 358 FR 21 (1.5 miles): Continue to operate and maintain as a Class 4 Snow Trail designed and managed for snowmobile use. No changes recommended.

NFST 385 VAST Corridor 7 (8.3 miles): Continue to operate and maintain as a Class 3 Snow Trail designed and managed for snowmobile use. No changes recommended.

NFST 445 Bromley Shelter Spur (0.0725 miles): Continue to operate and maintain Class 3 Terra Trail designed and managed for hiker/pedestrian.

NFST 446 Bromley Brook Vista Spur (0.0189 miles): Continue to operate and maintain Class 3 Terra Trail designed and managed for hiker/pedestrian.

NFST Grouse Lane Trail (3.3 miles): Add to FS system, construct and maintain as a Class 3 Terra Trail designed for mountain bike and managed for mountain bike and hiker/pedestrian use.

NFST Dorset Mountain Trail (3.4 miles): Add to FS system, reconstruct and maintain as a Class 3 Terra Trail designed for mountain bike up to the steep climb to the peak and then designed for hiker/pedestrian use to little Dorset Peak and managed for mountain bike and hiker/pedestrian use.

NFST Emerald Lake Connector Trail (0.678 miles): Add to FS system, construct and maintain as a Class 2 Terra Trail designed for hiker/pedestrian use and managed for hiker/pedestrian use.

NFST East Dorset Trail (3.1 miles): Add to FS system, construct/reconstruct and maintain as a Class 3 Terra Trail designed for hiker/pedestrian use and managed for hiker/pedestrian use.

Identification of areas of special sensitivity, unique resource values, or both.

See previous discussion under Steps 3 & 4 and future Dorset-Peru scoping documents.

Any other specific information that may be needed to support project-level decisions.

Please see the future Dorset-Peru scoping documents and any future Environmental Assessment.

Summary of Road Density within the Analysis Area

A summary of road miles and road densities for the existing and future condition is displayed in Table TA-10. The summary is based on the assumption that all opportunities recommended would be brought forward. The table includes only roads under Forest Service jurisdiction. Actual proposed density totals would be finalized based on project alternative development and final decisions during the NEPA process.

Table TA-10 Summary of Road Density (NFS Roads only) by Management Area

		Existing Condition		Future Condition	
Management Area	**Sq. Miles**	**Miles**	**Miles/sq mi.**	**Miles**	**Miles/sq mi.**
3.1 - Open Roads	7.011	5.000	0.713	5.00	0.713
3.1 - Closed Roads	7.011	0.000	0	0.00	0
3.1 – All Roads	7.011	5.000	0.713	5.00	0.713
6.1 - Open Roads	4.613	0.000	0	0.050	0.011
6.1 - Closed Roads	4.613	0.000	0	0.000	0
6.1 – All Roads	4.613	0.000	0	0.050	0.011
6.3 - Open Roads	1.578	0.020	0.013	0.020	0.013
6.3 - Closed Roads	1.578	0.020	0.013	1.100	0.697
6.3 – All Roads	1.578	0.020	0.013	1.120	0.710
8.1 - Open Roads	0.817	0.080	0.098	0.080	0.098
8.1 - Closed Roads	0.817	0.000	0	0.000	0
8.1 – All Roads	0.817	0.080	0.098	0.080	0.098
8.5 - Open Roads	3.475	0.000	0	0.100	0.029
8.5 - Closed Roads	3.475	0.700	0.201	0.000	0
8.5 – All Roads	3.475	0.700	0.201	0.100	0.029

Table TA-10 Note: There are no existing or planned NFS roads in MA's 5.1, 7.1, 9.3 or 9.4.

From Table TA-10 we see that the recommended changes to NFS roads within the analysis area is minor, with the largest increase in miles/sq. mile coming in the 6.3 MA (0.013 vs. 0.710 for all roads) while other MA's are the same or see reduced miles/sq. mile. MA 6.1 does have a slight increase in miles/sq. mile due to a proposed trail head parking area (proposed NFSR 461). There are a number of temporary spur haul roads and skid trails recommended (see pages XX, XX, and XX) for vegetation management; but any affects from these will be reduced significantly because of project implementation in most areas during winter (frozen ground) conditions and their temporary nature.

LITERATURE SITED / REFERENCES

- Green Mountain National Forest Land and Resource Management Plan, 2006, USDA Forest Service
- Roads Analysis Process (RAP) Report –Green Mountain National Forest, January 2003, USDA Forest Service
- FS-643 Roads Analysis: Informing Decisions About Managing the National Forest Transportation System, August 1999, USDA Forest Service

- Federal Register, Part IV Department of Agriculture, Forest Service, 36 CFR Parts 212, 251, 261, and 295 Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule, November 9, 2005

- Vermont General Highway Map, Towns of Dorset, Peru, Manchester, and Winhall; prepared by the Vermont Agency of Transportation in cooperation with the US DOT and FHWA.

- GMNF Road R/W Status Maps & Tabular Data and Survey Plats for the Project Area

- Forest Service Manual (FSM) and Forest Service Handbook (FSH) applicable sections related to roads and trails.

- Motor Vehicle Use Map Green Mountain National Forest, March 2011

- US Department of Agriculture, Forest Service, Green Mountain National Forest. 2011. "Dorset Peru Integrated Resource Project: Trail Feasibility assessment." Unpublished report, Green Mountain and Finger Lakes National Forests Rutland, Vermont.

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